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2012/016

Serial No.: 09/991.911

Art Unit: 2624

September 30, 2005

REMARKS/ARGUMENTS

Claims 1-20 are pending in this application.

The Examiner has rejected claims 1-6 and 18-19 under 35 U.S.C. 102(b) as being

anticipated by Jung et al. (U.S. Patent No. 5,978,030). The Examiner has also rejected

claims 1-5, 7, 9, 11, 13-14 and 18-20 under 35 U.S.C. 102(b) as being anticipated by Jung

et al. (U.S. Patent No. 5,654,761). The Examiner has also rejected claims 8, 10, 12 and 15-

17 under 35 U.S.C. 103.

Applicant appreciates the Examiner's review of Applicant's arguments in the

Response of February 3, 2005. However, Applicant would like to clarify those arguments

for reconsideration by the Examiner. In particular, although Applicant's arguments focused

on the first image and second image being different images, this was intended as an

example to highlight that both Jung '030 and Jung '761 make use of an error signal

between a current image and a predicted current image (which can be thought of as the

same image) while making use of motion vectors between a reference image and a current

image (which can be though of as different images), as explained in more detail below.

Applicant submits that, roughly speaking, June '030 and Jung '761 include three

types of frames: a reference frame (which can also be considered a previous frame, and

may be a reconstructed reference frame), a current frame and a predicted current frame.

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Further, motion vectors are only obtained between a reference frame and a current frame

in, for example, motion compensation device 150 of Jung '030, while an error signal is only

obtained between a predicted current frame and a current frame, in, for example, subtractor

102 in Jung '030.

Thus, even if we assume that the first image and the second image of the

independent claims in the present invention correspond to the reference frame and the

current frame of the Jung references and that motion vectors correspond to positional

information and error signals correspond to difference data, there is a clear difference

between the present invention and the Jung references. In the present invention,

difference data on attribute values of the corresponding points between the first and second

images is included in the corresponding point file (see, for example, claim 1) whereas in the

Jung references, there is no error signal (difference data) calculated between the reference

frame and the current frame. In the Jung references, difference data is only calculated

between the predicted current frame and the current frame. Since this set of frames is

different from the set of reference frame and current frame they cannot also correspond to

the first frame and the second frame in claim 1 of the current application.

On the other hand, even if we assume that the first image and the second image of

the present invention correspond to the predicted current frame and the current frame,

there is a similar difference between the present invention and the Jung reference. In the

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Jung references there are no motion vectors calculated between the current frame and the

predicted current frame whereas in the current application positional information of the

corresponding points is also generated between the first and second images.

In the present claim 1, it is clear that positional information on the corresponding

points and difference data on attribute values of the corresponding points both relate to

corresponding points between the first image and the second image. Thus, the first and

second images of the present claims can only correspond to one of: (a) the set of the

current frame and the reference frame or (b) the set of the current frame and the predicted

current frame from the Jung references. In either case, there are elements of the claims

which are not taught or suggested by Jung '030 or Jung '761 either separately or in

combination.

Further, in the Jung references, the motion vectors are obtained to allow a predicted

frame to be made from a reference frame and the error signal is obtained to allow the

predicted current frame to be corrected to be closer to the current frame. This is in contrast

to the current application, in which corresponding points (including positional information

and difference data) are obtained to allow interpolation between the first and second

images using only the first image and the corresponding point file. Thus, the objectives of

the Jung references and the present application are significantly different and would have

different results. Since the error signal in Jung is between the current frame and the

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predicted current frame, it is useful in adjusting the predicted current frame once created

but is not useful in an interpolation between the reference frame and the current frame. In

the present application, because the difference data is between the first image and the

second image, an interpolation can be performed that is based on the difference data as

well as positional information.

In this regard, Applicant submits that the Jung references do not teach or suggest an

interpolation that involves generating intermediate frames by using a difference value of a

pixel attribute between a first and second image to adjust that pixel attribute for

intermediate frames. In particular, Applicant submits that the Jung references do not teach

or suggest "acquiring a corresponding point file which describes a matching result of a first

image and a second image wherein the corresponding point file compriese positional

information on points which correspond between the first image and the second image and

difference data of attribute values of points which correspond bwtween the first image and

the seond image; and generating an intermediate image based on the first image and the

second image by performing interpolation on the first image and the corresponding point

file" as claimed in, for example, independent claim 4. As such, applicant submits that claim

4 is in condition for allowance.

For at least similar reasons, independent claims 5, 7, 14 - 17 are also believed to be

In condition for allowance. Also, for similar reasons and the additional features contained

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therein, dependent claims 2-3, 6, 8-13, 18-20 are also believed to be in condition for allowance.

Conclusion:

In view of the foregoing amendments and remarks it is respectfully submitted that this application is in condition for allowance. Favourable consideration and prompt allowance are earnestly solicited:

Respectfully submitted,

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